



PATENT  
Attorney Docket No.: 18693.18  
Customer No. 000027683

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re application of:  
John G. Freshwater et al.

Serial No.: 10/613,152

Filed: July 3, 2003

For:  
System and Method for Cutting Roofing Shingles

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Group Art Unit: 3724

Examiner: Goodman, Charles

Confirmation No.: 6735

**MAIL STOP RCE**

Commissioner of Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

**TRANSMITTAL**

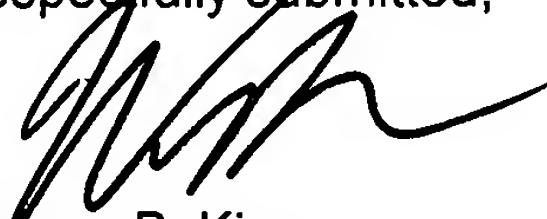
Dear Sir:

Applicant submits the following documents for filing in the referenced application:

1. Request for Continued Examination (RCE) Transmittal;
2. copy of Response to Office Action filed November 15, 2005;
3. Petition For Extension Of Time Under 37 CFR 1.136(a);
4. Check in the amount of \$1240.00 to cover the fees under 37 CFR 1.17(e) and 1.17(a)(2); and
5. Return postcard.

The Commissioner is hereby authorized to charge Deposit Account No. 08-1394 for any additional fees associated with this communication or credit any overpayment.

Respectfully submitted,

  
Warren B. Kice  
Registration No. 22,732

Dated: 1/9/06  
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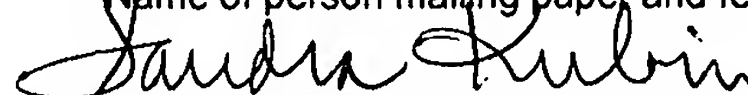
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DATE OF DEPOSIT: January 9, 2006

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**SANDRA KUBIN**

Name of person mailing paper and fee



Signature of person mailing paper and fee

## A circular black and white stamp. The outer ring contains the text "OIP" at the top and "PATENT &amp; TRADEMARK OFFICE" at the bottom. The center of the stamp contains the date "JAN 09 2006".

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Confirmation No.: 6735

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Alexandria, VA 22313-1450

## II. Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A system for cutting shingles from a continuous sheet of material, the system comprising:

~~a cylinder having a circumference substantially equal to twice the length of each shingle;~~

~~a cutting blade assembly extending around the outer surface of the cylinder and adapted to cut four different patterns in the strip with each pattern forming two shingles;~~  
and

a first cutting blade extending over the circumference of the cylinder and adapted to make a continuous longitudinal cut down the center of the strip to separate the strip into two half portions;

a second cutting blade mounted to the outer surface of the cylinder and extending over approximately one half of the circumference of one of the half portions of the cylinder;

a third cutting blade mounted to the outer surface of the cylinder and extending over approximately the other half of the circumference of the one half portion of the cylinder;

a fourth cutting blade mounted to the outer surface of the cylinder between the first cutting blade and the opposite end of the cylinder and extending over approximately one half of the circumference of the other half portion of the cylinder;

a fifth cutting blade mounted to the outer surface of the cylinder and extending over approximately the other half of the circumference of the other half portion of the cylinder; and

means for rotating the cylinder with the blades engaging the sheet while effecting relative translational movement between the cylinder and the sheet so that each blade cuts two shingles upon engaging the material;

the cylinder having a circumference substantially equal to twice the length of each shingle so that eight shingles are cut from the sheet upon one rotation of the cylinder.

2. (canceled)

3. (canceled)

4. (canceled)

5. (Currently Amended) The system of claim 1 wherein the ~~patterns~~ shingles cut by at least two of the blades are ~~dragon tooth patterns~~ different.

6. (Currently Amended) The system of claim 1 wherein each ~~series of cutting blades cuts a first pair of shingles, each shingle having a plurality of tabs extending in the spaces between adjacent tabs of the other shingle; and a second pair of shingles laterally spaced from the first pair, each shingle of the second pair of shingles having a plurality of tabs extending in the spaces between adjacent tabs of the other shingle of the second pair of shingles~~ blade cuts two shingles having interlocking tabs.

7. (Original) The system of claim 6 wherein the blades are configured so that at least a portion of the tabs of each shingle are different from the tabs of at least a portion of the other shingles.

8. (Original) The system of claim 6 wherein the blades are configured so that the tabs of each shingle are different from the tabs of the other shingles.

9. (Original) The system of claim 6 or 7 wherein the difference is in the shape of the tabs.

10. (Original) The system of claim 9 wherein the tabs vary in width and/or length.

11. (Original) The system of claim 6 wherein at least a portion of the tabs of the same shingle are different.

12. (Original) The system of claim 11 wherein the difference is in the shape of the tabs.

13. (Original) The system of claim 11 wherein the different tabs vary in width and/or length.

14-26 (canceled)

27. (Withdrawn) A roof comprising a plurality of shingles laid on a support structure according to the following  $C = L/N \pm 3$

where C is one of the course offsets, L is the length of each shingle, and N is the number of courses repeated during installation.

28. (Withdrawn) The roof of claim 27 wherein all of the shingles have a tooth covering the area  $C \pm 3$  from the left side of each shingle.

29. (Withdrawn) The roof of claim 28 wherein all of the shingles have a gap between teeth in the area  $C \pm 3$  from the right side of each shingle.

30. (Withdrawn) The roof of claim 27 wherein the sum of the offsets in the course repeat equal the shingle length.

31. (New) The system of claim 1 further comprising two additional blades mounted on the cylinder, each adapted to make a transverse cut across the sheet to separate the shingles cut by the second blade from the shingles cut by the third blade, and to separate the shingles cut by the fourth blade from the shingles cut by the fifth blade.

### III. Remarks

Claim 1 has been amended to incorporate the limitations of original claims 2-4 which have been canceled. Dependent claims 5 and 6 have been amended and dependent claims 7-13 have been maintained in their original form. Method claims 14-26 have also been cancelled, claims 27-30 have been withdrawn, and claim 31 has been added that depends on claim 1.

The previously presented claims were rejected under 35 U.S.C. §103(a) as being unpatentable over King in view of Simpson et al. It is requested that the examiner reconsider this rejection for the following reasons.

Amended claim 1 recites the use of five cutting blades mounted on a rotating cylinder as follows:

*a first cutting blade extending over the circumference of the cylinder and adapted to make a continuous longitudinal cut down the center of the strip to separate the strip into two half portions;*

*a second cutting blade mounted to the outer surface of the cylinder and extending over approximately one half of the circumference of one of the half portions of the cylinder;*

*a third cutting blade mounted to the outer surface of the cylinder and extending over approximately the other half of the circumference of the one half portion of the cylinder;*

*a fourth cutting blade mounted to the outer surface of the cylinder between the first cutting blade and the opposite end of the cylinder and extending over approximately one half of the circumference of the other half portion of cylinder; and*

*a fifth cutting blade mounted to the outer surface of the cylinder and extending over approximately the other half of the circumference of the other half portion of the cylinder.*

As a result, when the cylinder is rotated, the blades engage the sheet; and when there is relative translational movement between the cylinder and the sheet, each blade cuts two shingles upon engaging the material. In this manner by designing the circumference of the cylinder substantially equal to twice the length of each shingle, eight shingles are cut from the sheet upon one rotation of the cylinder.

As the PTO recognizes in MPEP §2142:

*The examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. If the examiner does not produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness.*

Here, the examiner clearly cannot establish a *prima facie* case of obviousness in connection with amended claim 1 since 35 U.S.C. §103(a) provides that:



*[a] patent may not be obtained ... if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains ... (emphasis added)*

Thus, when evaluating a claim for determining obviousness, all limitations of the claim must be evaluated. However, King and Simpson et al., alone, or in combination, do not disclose five blades mounted on a cylinder to cut shingles in the manner set forth in amended claim 1.

King is limited to a series of cutting cylinders 30, 72, 84, and 94 and does not mount five blades on one or more of the cylinders to cut shingles in the manner discussed above. Simpson is limited to a cylinder 12 having an assembly 29 of metal die rule members that pierce and score cardboard material and also does not mount five blades (or "rule members" in the case of Simpson) on cylinders to cut shingles in the manner discussed above

Given the above deficiencies in each of the King and Simpson patents, it is apparent that it would be impossible to combine them in any manner, including the manner set forth by the examiner, to meet all of the limitations of amended claim 1.

Therefore, it is impossible to render the subject matter of amended claim 1 as a whole obvious based on any combination of these patents, and the above explicit terms of the statute cannot be met. As a result, the examiner's burden of factually supporting a *prima facie* case of obviousness clearly cannot be met with respect to amended claim 1, and a rejection under 35 U.S.C. §103(a) is not applicable.

There is still another compelling, and mutually exclusive, reason why the King and Simpson et al. patents cannot be combined and applied to reject amended claim 1 under 35 U.S.C. §103(a).

The PTO also provides in MPEP §2142:

*[T]he examiner must step backward in time and into the shoes worn by the hypothetical "person of ordinary skill in the art" when the invention was unknown and just before it was made. In view of all factual information, the examiner must then make a determination whether the claimed invention "as a whole" would have been obvious at that time to that person. ...[I]mpermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.*

Here, King and Simpson et al. do not teach, or even suggest, the desirability of the combination since neither teaches nor suggests providing a cylinder having five blades mounted thereon.

Thus, neither of these patents provides any incentive or motivation supporting the desirability of the combination. Therefore, there is simply no basis in the art for combining the references to support a 35 U.S.C. §103(a) rejection of amended amended claim 1.

In this context, the MPEP further provides at §2143.01:

*The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. (emphasis in original)*

In the above context, the courts have repeatedly held that obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination. In the present case it is clear that the examiner's combination arises solely from hindsight based on the invention without any showing, suggestion, incentive or motivation in either reference for the combination as applied to amended claim 1. Therefore, for this mutually exclusive reason, the examiner's burden of factually supporting a *prima facie* case of obviousness clearly cannot be met with respect to amended claim 1, and the rejection under 35 U.S.C. §103(a) is not applicable.

In view of all of the above, the allowance of the claims now presented is respectfully requested.

The examiner is invited to call the undersigned at the below-listed telephone number if a telephone conference would expedite or aid the prosecution and examination of this application.

Respectfully submitted,



Warren B. Kice  
Registration No. 22,732



Appl. No. 10/613,152  
Reply to Office Action of 08/25/2005

Patent/Docket No. 18693.18  
Customer No. 000027683

Dated: 11/15/05  
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**CANDRA KUBIN**

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